REMARKS

By the foregoing amendments, claims 2, 5, 6 and 8 further emphasize a critical distinction over the prior art references of record, as already set forth in parent claims 1, 3 and 7 as hereinafter pointed out. Also, the rejection of claims 5 and 6 under 35 U.S.C. 112 is avoided and new claim 9 submitted embodying all of the emphasized distinguishing limitations.

On page 3 of the Office action, it is again conceded that the Nakamori et al. patent fails to disclose use of a gas spraying technique to coat a surface by atomization of the corrosion-resisting type of ductile alloy endowed with high strength when cast onto the surface as specified in claims 1, 5 and 7. The disclosure in the newly cited Shaw patent is also inadequate on this account, since it also fails to disclose use of a gas spraying technique which explicitly involves selection of a cover gas to increase alloy strength.

Although use of a gas spraying coating technique is itself well known in the art, as reflected by the disclosures in the Coombs patent and in the newly cited Jenkins patent, the latter two prior art references fail to explicitly suggest, teach or motivate selection of a cover gas to increase strength of a ductile corrosion-resisting type alloy being cast onto a surface. Unless some portion of the disclosures in the Coombs and Jenkins patents are identified for explicitly evidentiary support of obviousness, the current rejection of claims 1-3 and 5-8 over the combination of prior art references involves a legal judgment under 35 U.S.C. 103(a) deemed to be improper according to current case law, as indicated for example by the CAFC in the case of In re Lee, 61 USPQ 2d 1430.

In regard to the foregoing referred to patentable distinction set forth in claims 1, 5 and 7 over the four prior art references relied on, claims 2, 5 and 6 and 8 as well as new claim 9 not only avoid the rejection under 35 U.S.C. 112, second paragraph as stated on page 2 of the Office

action, but further emphasize the patentable distinction by explicitly indicating the extent to which the strength of the ductile corrosion-resisting alloy is increased.

In view of the foregoing, an allowance of claims 1-3 and 5-9 is believed to be in order.

Respectfully submitted,

Jacob Shuster

JACOB SHUSTER, Reg. No. 19,660
Attorney for Applicants

Tele: (301) 227-1834

OFFICE OF COUNSEL CODE 004
NAVAL SURFACE WARFARE CENTER
CARDEROCK DIVISION HEADQUARTERS
DAVID TAYLOR MODEL BASIN
9500 MACARTHUR BOULEVARD
WEST BETHESDA, MD 20817-5700

MARKED-UP VERSION OF AMENDMENTS TO THE CLAIMS

Rewrite claims 2, 5, 6 and 8 as follows:

2. (Amended) The method as defined in claim 1, wherein said metal is nickel and the corrosion resisting material forming the component is chromium constituting between 48% and 52% of weight of the alloy as the high content thereof whereby said ductile alloy is boosted to said high strength by said casting, from a yield strength of less than 145 ksi.

5. (Amended) In a method of casting a ductile alloy having a base metal by heating thereof to produce a molten stream that is atomized into a spray of droplets directed onto a moving substrate surface; the improvement residing in: selecting a corrosion resisting material as a component of the alloy undergoing said heating; exclusively limiting said alloy to the base metal and the corrosion resisting material; and utilizing an inert cover gas to atomize the molten stream into said spray of droplets for deposit onto said surface to increase in strength the ductile alloy from a yield strength of less than 145 ksi.

6. (Amended) The method as defined in claim 5, wherein said base metal is nickel, the corrosion resisting material is chromium and the inert cover gas is nitrogen selected to effect said increase in strength of the ductile alloy with ductility improved from less than 25% tensile elongation.

8. (Amended) The method as defined in claim 7, wherein said base metal is nickel, said corrosion-resisting material is chromium and said inert cover gas is nitrogen selected to achieve said high strength of the alloy when cast onto said surface.

Kindly add the following claim:

9. In a method of coating a surface with a ductile alloy; the improvement residing in: casting onto said surface a molten stream exclusively limited to; a corrosion-resisting material constituting between 48% and 52% of the ductile alloy undergoing heating during said casting for increase in strength thereof; a base metal; and an inert cover gas selected to atomize the molten stream into a spray of droplets for deposit onto the surface thereby effecting said increase in strength of the ductile alloy during said casting from a yield strength of less than 145 ksi.